Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-82 (*canceled*).

83. (*Currently Amended*) A material comprising the reaction product of an A-side comprising an isocyanate and a B-side comprising a transesterified polyol and a urethane catalyst, wherein the transesterified polyol is produced by combining components to form a mixture that forms the transesterified polyol wherein the components of the mixture comprise a first polyol having at least two hydroxyl groups, and a blown vegetable oil having fatty acid chains, and wherein the mixture further comprises an esterification catalyst or the mixture is heated to from about 198° F to 325° F, and wherein the blown vegetable oil comprises from 70% by weight to 98.8% by weight of the mixture and wherein the blown vegetable oil comprises a blown vegetable oil chosen from the group consisting of a blown palm oil, a blown safflower oil, a blown canola oil, a blown soy oil, a blown cottonseed oil, and a blown rapeseed oil.

84. (*Currently Amended*) The material of claim 83, wherein the A-side and B-side are reacted in a ratio range of A-side to B-side of from 31 parts to 100 parts A-side to 100 parts B-side and the B-side comprises the transesterified polyol in an amount of from 27.5% by weight to 99.6% by weight of the B-side wherein the transesterified polyol has an ester linkage between one or more fatty acid chains of the blown vegetable oil and the first polyol such that the transesterified polyol has at least two hydroxyl groups.

85. (*Previously Presented*) The material of claim 84, wherein the A-side and B-side are reacted in a ratio range of A-side to B-side of from 61 parts to 100 parts A-side to 100 parts B-side.

86. (*Previously Presented*) The material of claim 83, wherein the mixture further comprises a saccharide compound.

87. (*Previously Presented*) The material of claim 86, wherein the saccharide compound comprises a saccharide compound chosen from monosaccharides, disaccharides, oligosaccharides, sugar alcohols, and honey.

88. (*Previously Presented*) The material of claim 86, wherein the saccharide compound comprises glucose.

89. (*Previously Presented*) The material of claim 86, wherein the saccharide compound comprises sorbitol.

90. (*Previously Presented*) The material of claim 86, wherein the saccharide compound comprises cane sugar.

91. (*Previously Presented*) The material of claim 83, wherein the first polyol comprises multifunctional alcohol wherein the multifunctional alcohol comprises a multifunctional alcohol chosen from glycerin, butanediol, ethylene glycol, tripropylene glycol, dipropylene glycol, and aliphatic amine tetrol.

92. (*Previously Presented*) The material of claim 83, wherein the B-side further comprises a crosslinker and wherein the components of the mixture comprise a transesterification catalyst and the transesterification catalyst comprises a tetra-2-ethylhexyl titonate.

93. (*Previously Presented)* The material of claim 92, wherein the crosslinker comprises a crosslinker chosen from glycerin, ethylene glycol, butanediol, dipropylene glycol, tripropylene glycol, dipropylene glycol, and aliphatic amine tetrol and the mixture comprises a

transesterification catalyst and the mixture is heated to a temperature of from 198° F to 250° F.

94. (*Previously Presented*) The material of claim 83, wherein the B-side further comprises a blowing agent and the mixture heated to a temperature of from 198° F to 250° F.

95. (*Previously Presented*) The material of claim 94, wherein the blowing agent comprises a blowing agent chosen from water, acetone, methyl isobutyl ketone, methylene chloride, a hydrochloroflurocarbon, and a hydroflurocarbon and the mixture further comprises a transesterification catalyst.

96. (*Previously Presented*) The material of claim 83, wherein the isocyanate comprises a diisocyanate compound and the mixture is heated to a temperature of from 198° F to 250° F and a tetra-2-ethylhexyl titonate transesterification catalyst.

97. (*Previously Presented*) The material of claim 83, wherein the A-side consists of the isocyanate and the isocyanate comprises an isocyanate chosen from the group consisting of 2,4' toluene diisocyanate, 4,4' diphenylmethane diisocyanate, and 2,4 diphenylmethane diisocyanate and wherein the mixture is heated to a temperature of from 198° F to 325° F and wherein the material is a flexible urethane foam.

98. (*Previously Presented*) The material of claim 83, wherein the isocyanate comprises a prepolymer comprising the reaction product of a vegetable oil and an isocyanate.

99. (*Previously Presented*) The material of claim 83, wherein the material is a flexible urethane foam material.

100. (*Previously Presented*) The material of claim 83, wherein The B-Side further comprises a petroleum based polyol and the petroleum based polyol comprises a petroleum based polyol chosen from polyether polyol, polyester polyol, and polyurea polyol.

101. (*Previously Presented*) A material comprising a transesterified product of a mixture comprising a blown vegetable oil wherein the blown vegetable oil comprises a blown vegetable oil chosen from the group consisting of a blown palm oil, a blown safflower oil, a blown canola oil, a blown soy oil, a blown cottonseed oil, and a blown rapeseed oil and a polyol component containing a plurality of functional hydroxyl groups wherein the blown vegetable oil is present in an amount of from 52 to 96% by weight of the mixture and the blown vegetable oil and the polyol component are heated to a temperature of from 198° F to 250° F.

102. (*Previously Presented*) The material of claim 101, wherein the mixture further comprises a transesterification catalyst.

103. (*Previously Presented*) The material of claim 102, wherein the polyol component containing a plurality of functional hydroxyl groups comprises a multifunctional alcohol wherein the multifunctional alcohol comprises a multifunctional alcohol chosen from the group containing glycerin, butanediol, ethylene glycol, tripropylene glycol, dipropylene glycol, and aliphatic amine tetrol.

104. (*Previously Presented*) The material of claim 103, wherein the mixture further comprises a saccharide compound.

105. (*Previously Presented*) The material of claim 104, wherein the saccharide compound comprises a saccharide chosen from monsaccharides, disaccharides, oligosaccharides, sugar alcohol, and honey.

106. (*Previously Presented*) The material of claim 101, wherein the polyol component containing a plurality of functional hydroxyl groups comprises a multifunctional alcohol wherein the multifunctional alcohol comprises a multifunctional alcohol chosen from the group

containing glycerin, butanediol, ethylene glycol, tripropylene glycol, dipropylene glycol, and aliphatic amine tetrol.

107. (*Previously Presented*) The material of claim 106, wherein the mixture further comprises a saccharide compound.

108. (*Previously Presented*) The material of claim 107, wherein the saccharide compound comprises a saccharide chosen from monsaccharides, disaccharides, oligosaccharides, sugar alcohol, and honey.